

**CLAIMS**

1. A method for managing a multi-tiered resource system, the method comprising:

    determining if a resource tier is in compliance with a management policy; and

5    if the resource tier is not in compliance with the management policy, automatically attempting to bring the resource tier in compliance with the management policy.

2. The method of claim 1, wherein automatically attempting to bring the resource tier in compliance with the management policy includes allocating additional capacity to containers belonging to the resource tier until the resource tier is in compliance with the  
5 management policy.

3. The method of claim 2, wherein allocating additional capacity to the containers includes utilizing a capacity reserve belonging to the resource tier.

4. The method of claim 2, wherein allocating additional capacity to the containers includes utilizing available capacity from other containers in the resource system.

5. The method of claim 2, wherein allocating additional capacity to the containers includes allocating additional capacity to containers of higher importance before allocating additional capacity to containers of lower importance.

6. The method of claim 1, wherein the management policy includes requiring that an expiration date of the resource tier occur after a maintenance date.

7. The method of claim 6, further comprising calculating the expiration date of the resource tier.

8. The method of claim 7, wherein calculating the expiration date of the resource tier includes calculating a life expectancy of each container belonging to the resource tier.

9. The method of claim 8, wherein calculating the life expectancy of the containers includes adjusting the life expectancy of the containers to account for container lead-time.

10. The method of claim 1, further comprising if the resource tier cannot be brought in compliance with the management policy, alerting that the resource tier is not in compliance with the management policy.

11. The method of claim 1, wherein automatically attempting to bring the resource tier in compliance with the management policy includes compressing data within the resource tier until the resource tier is in compliance with the management policy.

12. A system for managing a multi-tiered resource system, the system comprising:

means for determining if a resource tier is in compliance with a management policy; and

5 means for automatically attempting to bring the resource tier in compliance with the management policy if the resource tier is not in compliance with the management policy.

13. A system for managing a multi-tiered resource system, the system comprising:

a determining module configured to determine if a resource tier is in compliance with a management policy; and

5 a processing module configured to automatically attempt to bring the resource tier in compliance with the management policy if the resource tier is not in compliance with the management policy.

14. The system of claim 13, wherein the processing module is further configured to allocate additional capacity to containers

belonging to the resource tier until the resource tier is in compliance with the management policy.

15. The system of claim 14, wherein the processing module is further configured to utilize a capacity reserve belonging to the resource tier.

16. The system of claim 14, wherein the processing module is further configured to utilize available capacity from other containers in the resource system.

17. The system of claim 14, wherein the processing module is further configured to allocate additional capacity to containers of higher importance before allocating additional capacity to containers of lower importance.

18. The system of claim 13, wherein the management policy includes requiring that an expiration date of the resource tier occur after a maintenance date.

19. The system of claim 18, wherein the determining module is further configured to calculate the expiration date of the resource tier.

20. The system of claim 19, wherein the determining module is further configured to calculate a life expectancy of each container belonging to the resource tier.

21. The system of claim 20, wherein the determining module is further configured to adjust the life expectancy of the containers to account for container lead-time.

22. The system of claim 13, further comprising an alert module configured to alert that the resource tier is not in compliance with the management policy if the resource tier cannot be brought in compliance with the resource policy.

23. The system of claim 13, wherein the processing module is further configured to compress data within the resource tier until the resource tier is in compliance with the management policy.

24. A computer program product embodied in a tangible media comprising:

computer readable program codes coupled to the tangible media for managing a multi-tiered resource system, the computer readable program codes configured to cause the program to:

5 determine if a resource tier is in compliance with a management policy; and

automatically attempt to bring the resource tier in compliance with the management policy if the resource tier is not in compliance 10 with the management policy.

25. The computer program product of claim 24, wherein the program code configured to automatically attempt to bring the resource tier in compliance with the management policy includes program code configured to cause the program to allocate additional capacity to 5 containers belonging to the resource tier until the resource tier is in compliance with the management policy.

26. The computer program product of claim 25, wherein the program code configured to automatically attempt to bring the resource tier in compliance with the management policy includes program code configured to cause the program to utilize a capacity reserve belonging 5 to the resource tier.

27. The computer program product of claim 25, wherein the program code configured to automatically attempt to bring the resource tier in compliance with the management policy includes program code configured to cause the program to utilize available capacity from 5 other containers in the resource system.

28. The computer program product of claim 25, wherein the program code configured to automatically attempt to bring the resource tier in compliance with the management policy includes program code

5 configured to cause the program to allocate additional capacity to containers of higher importance before allocating additional capacity to containers of lower importance.

29. The computer program product of claim 24, wherein the management policy includes requiring that an expiration date of the resource tier occur after a maintenance date.

30. The computer program product of claim 29, wherein the program code configured to determine if the resource tier is in compliance with the management policy includes program code configured to cause the program to calculate the expiration date of the resource 5 tier.

31. The method of claim 30, wherein the program code configured to cause the program to calculate the expiration date of the resource tier includes program code configured to cause the program to calculate a life expectancy of each container belonging to the resource tier.

32. The computer program product of claim 31, wherein the program code configured to cause the program to calculate a life expectancy of each container belonging to the resource tier includes program code configured to cause the program to adjust the life 5 expectancy of the containers to account for container lead-time.

33. The computer program product of claim 24, further comprising program code configured to cause the program to alert that the resource tier is not in compliance with the management policy if the resource tier cannot be brought in compliance with the management 5 policy.

34. The computer program product of claim 24, wherein the program code configured to automatically attempt to bring the resource tier in compliance with the management policy includes program code configured to cause the program to compress data within the resource 5 tier until the resource tier is in compliance with the management policy.